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EXAMINER

NGUYEN, CHAU T

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2176

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/457,420  
Filing Date: December 07, 1999  
Appellant(s): HILLER, DEAN

\_\_\_\_\_  
Shawn W. O'Dowd  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed on November 08, 2004.

**(1) Real Party in Interest**

The appellant's statement of the real party in interest contained in the brief is correct.

**(2) Related Appeals and Interferences**

The appellant's statement of the related appeals and interferences contained in the brief is correct.

**(3) Status of Claims**

The appellant's statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues contained in the brief is correct.

**(7) Grouping of Claims**

The appellants' statement of the grouping of the claims in the brief is correct.

**(8) Claims Appealed**

The copy of the appealed claims contained in the appendix pages 1-17 is correct.

**(9) Prior Art of Record**

Farber et al., U.S. Patent Number 6,185,598, issued on Feb. 6, 2001, but filed on Feb. 10, 1998 (hereinafter Farber).

Jerger et al., U.S. Patent Number 6,345,361, issued on Feb. 5, 2002, but filed on Jul. 15, 1998 (hereinafter Jerger).

Schneider, U.S. Patent Number 6,338,082, issued on Jan. 8, 2002 and filed on Mar. 15, 2000, but Provisional application No. 60/157,075.

**(10) New Prior Art**

No new prior art has been applied in this examiner's answer.

**(11) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims 1-17:

Claims 1-3, 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al (Farber), Patent No. 6,185,598, and further in view of Jerger et al. (Jerger), Patent No. 6,345,361.

**As to claim 1**, Farber discloses a method of processing an Internet site name comprising:

retrieving a regular expression stored at a Domain Name Server (col. 7, line 3 - col. 8, line 25, Fig. 2: the rule base in the reflector, which is associated with origin server (DNS), is a list of regular expressions); and

performing a regular expression comparison between a first Internet site name and a character pattern at a Domain Name Server (col. 7, line 3 – col. 8, line 25, Fig. 2 and Fig. 3: the resource identifier URL (first Internet site name) for a given request is looked up in the rule base by matching it sequentially with each regular expression).

However, Farber does not disclose identify an Internet Protocol address for multiple similar site names. In the same field of endeavor, Jerger discloses wildcard characters may be used to specify multiple domain names, for instance the regular expression “\*.microsoft.com” specifies all servers at the “Microsoft.com” second level domain (col. 17, lines 50-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Farber and Jerger to include identifying an Internet Protocol address for multiple similar site names. Jerger suggests using wildcard characters such as “\*” or “?” for searching site names. Using these teachings combination with the DNS name resolving taught by Farber would result in the invention as broadly claimed by resolving regular expression into an IP address.

**As to claim 2**, Farber and Jerger (Farber-Jerger) disclose transmitting the first Internet site name from a first computer system to the Domain Name Server over the Internet (Farber, col. 6, line 40 – col. 7, line 26).

**As to claim 3**, Farber-Jerger disclose transmitting a responsive message to the first computer system if a match is found in the regular expression comparison (Farber, col. 6, line 40 – col. 8, line 18).

Claims 9-12 are corresponding apparatus and a set of instruction claims containing similar limitations as discussed in the method of claims 1-3; therefore, they are rejected under the same rationale.

Claims 4-8 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber and Jerger as applied to claims 1-3, and 9-12 above, and further in view of Schneider, Patent No. 6,338,082.

**As to claim 4**, Farber and Jerger disclose the limitations as described in claims 1-3 and 9-10 above. However, Farber and Jerger do not disclose the regular expression uses a Unix regular expression format. In the same field of endeavor, Schneider discloses DNS is implemented in a hierarchy of DNS servers (Unix machines running Berkeley Internet Name Domain (BIND) software) and an application-layer protocol that allows hosts and DNS servers to communicate in order to provide the

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translation service (col. 3, lines 4-38 and col. 9, lines 45-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the use of Unix regular expression as taught by Schneider into the system comparing between an Internet address name and characters at a DNS of Farber and Jerger, thereby resulting in the claimed invention, since Schneider suggests that BIND is integrated into UNIX network programs for use in storing and retrieving host names and addresses.

**As to claim 5**, Farber-Jerger and Schneider (Farber-Jerger-Schneider) disclose the regular expression has a format  $\text{^d}\{10\}\$.X.Y$  where  $\text{^d}\{10\}\$$  represents a string of ten numbers, X represents a sub-level domain and Y represents a top-level domain (Jerger, col. 17, lines 12-67: "\*" character indicates zero or more characters and "?" indicates any single character, ".com" indicates top-level domain, ".microsoft.com" indicates sub-level domain or second level domain; Schneider, col. 3, line 66 – col. 4, line 12).

**As to claim 6**, Farber-Jerger-Schneider disclose the regular expression has a format  $\text{^[0-9]}\+$.X.Y$  where  $\text{^[0-9]}\+$  represents a string of numbers, X represents a sub-level domain and Y represents a top-level domain (Jerger, col. 17, lines 12-67: "\*" character indicates zero or more characters and "?" indicates any single character, ".com" indicates top-level domain, ".microsoft.com" indicates sub-level domain or second level domain; Schneider, col. 3, line 66 – col. 4, line 12).

**As to claim 7**, Farber-Jerger-Schneider disclose the regular expression has a format  $\text{\textasciitilde}^{\text{d}}\{10\}\$.Z$  where  $\text{\textasciitilde}^{\text{d}}\{10\}\$$  represents a string of ten numbers, and Z represents a geographically oriented top-level domain (Jerger, col. 17, lines 12-67: “\*” character indicates zero or more characters and “?” indicates any single character, “.com” indicates top-level domain, “.microsoft.com” indicates sub-level domain or second level domain; Schneider, col. 4, lines 13-30).

**As to claim 8**, Farber-Jerger-Schneider disclose the regular expression has a format  $\text{\textasciitilde}^{[0-9]}+\$.Z$  where  $\text{\textasciitilde}^{[0-9]}+\$$  represents a string of numbers, and Z represents a geographically oriented top-level domain (Jerger, col. 17, lines 12-67: “\*” character indicates zero or more characters and “?” indicates any single character, “.com” indicates top-level domain, “.microsoft.com” indicates sub-level domain or second level domain, Schneider, col. 4, lines 13-30).

Claims 13-17 are corresponding a set of instruction claims containing the similar limitations as the methods described in claims 4-8; therefore, they are rejected under the same rationale.



**(12) Response to Argument**

The examiner summarizes the various points raised by the appellant and addresses replies individually.

As per appellant's arguments filed on Nov. 8, 2004, the appellants argue in substance:

**Independent claims 1, 9 and 10**

A) "Farber, Jerger and Schneider, taken singularly or in combination, fail to teach or suggest performing regular expression comparisons with an Internet site name to identify an IP address for multiple similar site names at a Domain Name Server or DNS." (see page 5 of the Brief)

**In reply to argument A**, the Examiner's used only two references, which are Farber and Jerger, to reject claims 1, 9 and 10. Therefore, the Appellant cannot argued claims 1, 9 and 10 using more different reference than what the Examiner's cited in the claimed rejection. In this case, the Examiner will address the argument based on the two references Farber and Jerger.

In the specification, Applicant described "a Domain Name Server is modified so as to use a regular expression in the comparison between the requested site name and the series of the similar site names (whether actual or potential) associated with a

computer.” (page 4 of Summary of the Invention). Thus, the Domain Name Server in this application is not the same with any regular Domain Name Server. In this case, Farber discloses a method of processing an Internet site name comprising:

retrieving a regular expression stored at a Domain Name Server (col. 7, line 3 - col. 8, line 25, Fig. 2: the rule base in the reflector, which is associated with origin server (DNS), is a list of regular expressions); and

performing a regular expression comparison between a first Internet site name and a character pattern at a Domain Name Server (col. 7, line 3 – col. 8, line 25, Fig. 2 and Fig. 3: the resource identifier URL (first Internet site name) for a given request is looked up in the rule base by matching it sequentially with each regular expression).

However, Farber does not disclose identify an Internet Protocol address for multiple similar site names. In the same field of endeavor, Jerger discloses wildcard characters may be used to specify multiple domain names, for instance the regular expression “\*.microsoft.com” specifies all servers at the “Microsoft.com” second level domain (col. 17, lines 50-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Farber and Jerger to include identifying an Internet Protocol address for multiple similar site names. Jerger suggests using wildcard characters such as “\*” or “?” for searching site names. Using these teachings combination with the DNS name resolving taught by Farber would result in the invention as broadly claimed by resolving regular expression into an IP address.

B) The reflector in the reference Farber is not a Domain Name Server. (see page 7 of Brief)

**In reply to argument B**, the Examiner's already explained above that Applicant described in the specification "a Domain Name Server is modified so as to use a regular expression in the comparison between the requested site name and the series of the similar site names (whether actual or potential) associated with a computer." (page 4 of Summary of the Invention). Thus, the Domain Name Server in this application is not the same with any regular Domain Name Server. Since the reference Farber discloses in col. 7, line 3 - col. 8, line 25, Fig. 2 that the rule base in the reflector, which is associated with origin server (DNS), is a list of regular expressions, therefore, the reflector in this case can read as broadly as the modified DNS of the applicant's invention.

C) "Jerger fails to teach or suggest that the retrieval and comparison operations of the claims are performed at a Domain Name Server." (see page 8 of the Brief)

**In reply to argument C**, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091,

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231 USPQ 375 (Fed. Cir. 1986). Again, the Examiner combined references Farber and Jerger to address the claimed invention as discussed in reply to argument A above.

D) Schneider fails to make up for the deficiencies of Farber and Jerger and the comparisons performed in the Domain Name Servers of Schneider do not use regular expression comparisons. (see page 8 of Brief)

**In reply to argument D**, again, the Examiner's use reference Schneider to reject "comparison" limitation. In stead, the Examiner's combined the references Farber and Jerger for all the limitations in claims 1, 9 and 10 as discussed above. However, Farber and Jerger do not disclose the regular expression uses a Unix regular expression format (claim 4). Schneider discloses DNS is implemented in a hierarchy of DNS servers (Unix machines running Berkeley Internet Name Domain (BIND) software) and an application-layer protocol that allows hosts and DNS servers to communicate in order to provide the translation service (col. 3, lines 4-38 and col. 9, lines 45-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the use of Unix regular expression as taught by Schneider into the system comparing between an Internet address name and characters at a DNS of Farber and Jerger, thereby resulting in the claimed invention, since Schneider suggests that BIND is integrated into UNIX network programs for use in storing and retrieving host names and addresses.

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For the above reasons, it is respectfully submitted that the rejections should be sustained.

Conferee:

Respectfully Submitted,



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